

# [PHYSICAL VAPOR DEPOSITION PROCESS AND APPARATUS THEREFOR]

## Abstract

A physical vapor deposition apparatus is provided. The physical vapor deposition apparatus comprises: a reaction chamber; and an electromagnet magnetron device disposed above and outside said reaction chamber, wherein when performing a physical vapor deposition process, the magnetic poles of said electromagnet magnetron device are reversed in-situ to reduce the possibility of asymmetric deposition of the thin film on the sidewalls of the opening.